

Notice of Allowability

Application No.

09/893,364

Examiner

Thu Ha T. Nguyen

Applicant(s)

ALLEN, ARTHUR DOUGLAS

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on July 19, 2004.
2. ☒ The allowed claim(s) is/are 1-16, 18, 19, 21-29 and 31-36.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


HOSAIN ALAMI

SUPERVISORY PATENT EXAMINER

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Applicants' Representative, Mr. Eric K. Proul (Reg. No. 45,025), on September 23, 2004.

3. The application has been amended as follow:

In the claims:

4. Claim 1, after the words "(i) forming a hyperplane of control variables that aggregate to", delete --"the"--, insert --a-- .

5. Claim 1, after the words "(c) determining a cost function of the control variables for all clients wherein the cost function represents", delete --"and"--, insert --an--.

6. Claim 28, after the words "(i) forming a hyperplane of control variables that aggregate to", delete --"the"--, insert --a--.

7. Claim 28, after the words "(c) determining a cost function of the control variables for all clients wherein the cost function represents", delete --"and"--, insert --an--.

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8. Claim 36, after the words "(i) forming a hyperplane of control variables that aggregate to", delete --"the"--, insert --a--.

Reasons for Allowance

9. Claims 1-16, 18-19, 21-29, 31-36 are allowed.

10. Claims 17, 20, 30, 37 and 38 are cancelled without prejudice.

11. The following is an examiner's statement of reasons for allowance. Claim 20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as stated in the previous Office action. Accordingly, claims 1, 28 and 36 have been rewritten to include all of the limitations of allowable subject matter of claim 20 and intervening claim 17. Therefore, claims 1, 28 and 36 are now in condition for allowance. Similarly, dependent claims 2-16, 18-19, 21-27, 29, and 31-35 are also in condition for allowance as being dependent upon allowance claims 1, 28 and 36. Furthermore, claims 1, 28 and 36 claim a system and method of allocation for delivery of stored digital content from at least one server device to at least one client device is firmly documented by the cited prior arts. However, the invention has some particular combination limitations that are different and distinct from prior arts. Among the differences between claimed invention and the prior art of record, the major difference is the combination of forming a hyperplane of control variables that aggregate to a maximum allowed aggregate flow rate; computing a first vector of minimum allowed client flow rates; computing a second vector of maximum allowed client flow rates; determining a multi-dimensional shape of which an interior diagonal spans the first and second vectors; finding a solution of control variables at a point of

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intersection between the diagonal and the hyperplane and determining a cost function of the control variables for all clients wherein the cost function represents an aggregate flow rate and is a sum of all flow rates for all clients is novel thus the invention is patentable.

12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (703) 305-7447. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached at (703) 308-6662.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax number for art unit 2155 is (703) 872-9306.

Thu Ha Nguyen

September 24, 2004


HOSAIN ALAM
SUPERVISORY PATENT EXAMINER